

QU-DP14

1 to 4 DisplayPort Distribution Amplifier

OPERATION MANUAL



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Safety Precautions

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- > To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- > Do not attach the power supply cabling to building surfaces.
- > Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

Revision History

| Version No | Date | Summary of Change |
|------------|----------|---------------------|
| VR0 | 20110324 | Preliminary Release |

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1. Introduction

The DisplayPort (DP) 1 by 4 splitter allows single DP source to be display on four DP input monitors simultaneously. It supports video resolution up to 2560 x 1600 and audio up to PCM 7.1 switch provides a fast switch between source and display and save EDID's reading sink time to allow image display properly. The DP 1 by 4 splitter is an ideal device for your DP source to multi display.

2. Applications

- Multi DisplayPort monitor display
- Information sharing
- Advertising program

3. Package Contents

- 1 by 4 DisplayPort Splitter
- Operation Manual
- 5V/3 Power Adaptor

4. System Requirements

- DisplayPort output source equipment.
- DisplayPort input monitors.

5. Features

- Supports DisplayPort specification V1.1a
- Deep color video up to 12bit, resolution support up to 2560 x 1600
- Supports audio up to PCM 7.1(32-192kHz Fs sample rate)
- Supports pixel component formate with RGB; YCbCr 422; YCbCr 444
- Color sapce conversion between RGB and YCbCr color space
- Supports 1.62/2.7 Gbps data rate (Low/High bit rate)
- Supports flexible 1/2/4 lanes configurations; Full 10.8Gbps data ratesupport (4lanes at 2.7Gbps)
- Supports EDID switch and setting
 - *Note: This device supports only DisplayPort mode, it cannot connect DP to HDMI level shift convert.

6. Specifications

Frequency Bandwidth 10.8Gbps (4lanes at 2.7Gbps)

Audio Sampling Rate 192kHz

Input port 1 x Displayport

Output ports 4 x DisplayPort

Power Supply 5V / 3A DC (US/EU standards, CE/FCC/UL certified)

ESD Protection Human body model: ± 8kV (air-gap discharge)

± 4kV (contact discharge)

Dimensions (mm) 270(W) x 124.5(D) x 29(H)

Weight(g) 770

Chassis Material Aluminum

Silkscreen Color Black

Power Consumption 7W

Operating Temperature 0°C~40°C / 32°F ~ 104°F

Storage temperature $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} / -4^{\circ}\text{F} \sim 140^{\circ}\text{F}$

Relative Humidity 20~90% RH (non-condensing)

7. Hardware Description

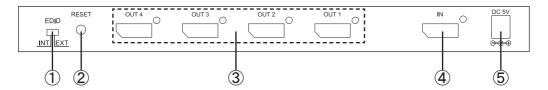
The following sections describe the hardware components of the unit.

7.1 Front Panel



① Power LED: The LED will illuminate in green when power on and in red when in reset mode.

7.2 Rear panel

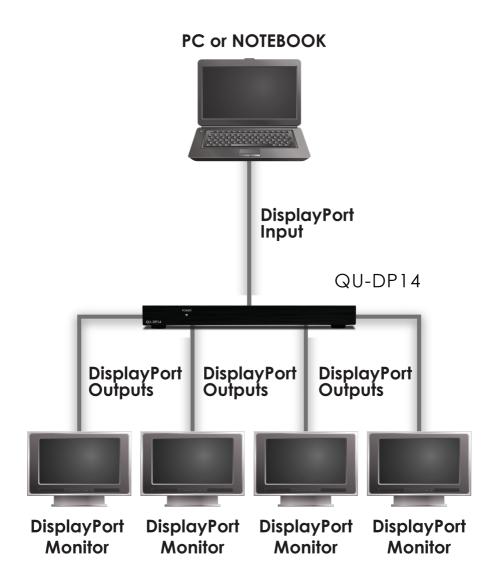


- (1) EDID switch INT/EXT: This switch allows user to select the built-in EDID (INT) or the display's EDID (EXT).
 - Note: When the EDID switch is on EXT, the unit will detect OUTput 1's display EDID and record in the unit. If the first etected OUTput 1 is not connected, it will pass to the next which is OUTput 2...... and so on until the display's EDID is recoreded in the unit.
- ② RESET: Press this button every time when switch the EDID allowing the device to update the EDID selection.
- \bigcirc DP OUT 1 ~ 4: These slots are where you connect the DP cable or DP to DP cable to your DP/DP input displayer for displaying a single source on two screens simultaneously.
- 4 DP IN: This slot is where you connect the DP cable from the source equipment for signal sending.
- (5) DC 5V: Plug the adaptor to the AC wallout for power supply to the device.

8. STD Mode EDID Support Format

| Video Support | | |
|---------------|---|--|
| VGA | • | |
| 720p | • | |
| 2560x1440 | • | |
| Audio Support | | |
| PCM 2CH 48K | • | |
| PCM 2CH 44.1K | • | |
| PCM 2CH 32K | • | |

9. Connection and Installation







Acronym Complete Term

EDID Extended Display identification Data

DP DisplayPort



www.cypeurope.com